

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Amite County Schools

Prepared By: Travis W. Stewart Miss. Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-23

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

**Property Name: 1601N06E** 

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#### LANDOWNER INFORMATION

Name: Amite County Schools

Mailing Address: P. O. Box 378 City, State, Zip: Liberty, MS 39645

Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-657-4361

Fax Number:

E-mail Address:

Social Security Number (optional):

#### FORESTER INFORMATION

Name: Travis W. Stewart, Forester

Forester Number: 02367

Organization: Miss. Forestry Commission

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#### PROPERTY LOCATION

County: Amite Total Acres: 640 Latitude: -90.61 Longitude: 31.05

Section: 16 Township: 1N Range: 6E

#### INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

#### **DISCLAIMER**

This information was derived from a small sampling of forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be relected in this plan.

#### **OBJECTIVES**

#### Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

#### Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

#### PROPERTY DESCRIPTION

#### General Property Information

This section is located approximately 12 miles south east of Liberty on the P P Wilson road. It contains 640 acres with 537 acres in forest. This section can be accessed easily from P.P. Wilson Rd., Grange Hall Rd., and McMillian Rd.

#### Water Resources

No perennial water resources were identified during a reconnaissance of the property. However, all ponds, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

#### Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

#### Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

#### Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

#### Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other

adverse effects on the soil. The following soils are identified for this property: Ora, Ruston, Gillsburg, Smithdale, Providence

Archeological or Cultural Resources:

These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

No Archeological or Cultural resources were identified during a reconnaissance of the property. However, if Archeological or Cultural resources are discovered anytime on the property special managements measures will be applied immediately in order preserve these sensitive areas.

#### GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- · Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- · Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

#### Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

#### Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

#### **Boundary Lines**

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

**Note:** Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

#### Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

#### Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

#### SOIL TYPES

Ora

The Ora component makes up 90 percent of the map unit. Slopes are 2 to 8 percent. This component is on uplands. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 70.

#### Ruston

The Ruston component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on coastal plains. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high.

Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 91. Longleaf Site Index = 76. Slash Site Index = 91.

#### Gillsburg

The Gillsburg component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

#### Smithdale

The Smithdale component makes up 90 percent of the map unit. Slopes are 12 to 35 percent. This component is on hillslopes. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

#### Providence

The Providence component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 87. Longleaf Site Index = 73.

#### **STRATA**

Strata 2 - Stands 6,10,14,16, 21
Strata Description
Stands 6 (13.89 Ac.), 10 (23.86 Ac.), 14 (7.27 Ac.), 16 (3.09 Ac.), 21 (56.01 Ac.)
104.12 Acres

This strata consist of 104 acres of machine planted loblolly pine which was planted in 1987, and consists of pulpwood to chip-n-saw sized trees. This strata is fully stocked. This strata was thinned in the Winter of 2009 and 2010. The residual basal area is approximately 70 square feet. The second thin for this strata is scheduled for 2017.

#### Strata Recommendations

This strata will be thinned for a second time in 2017. It will be grown to a 35 year rotation, harvested, and regenerated back into loblolly pine.

#### **Activity Recommendations**

Harvest

This strata will have a second thinning in 2017. It will focus on removing poor quality, diseased, or poor formed trees. This thin will be based on single tree selection, and will bring the basal area down to approximately 70 square feet.

Strata 3 - Stands 9, 23 Strata Description

Stands 9 (2.14 Ac.), 23 (117.59 Ac.)

119.73 Acres

This strata consists of 119 acres of pine sawtimber. The understory consists of hardwood underbrush about 8 feet high. The strata was thinned 16-19 years ago. A regeneration harvest will be performed in 2016, and the strata will then be regenerated back into loblolly pine.

#### Strata Recommendations

This strata will be allowed to mature and harvested in 2016, then artificially regenerated into loblolly pine and will be managed for a 35 year rotation.

#### **Activity Recommendations**

Harvest

A regeneration harvest will be performed in the year 2016 on this strata

#### Site Preparation

This strata will be site prepared by chemical application, and site prep burned, if needed, in 2017.

#### Regeneration

This strata will be regenerated in 2017 with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 4 - Stands 3,11,17,18
Strata Description
Stands 3 (86.3 Ac.), 11 (10.38 Ac.), 17 (9.13 Ac.), 18 (2.49 Ac.)

108.30 Acres

This strata consists of 108 acres of pine sawtimber. The understory consists of hardwood underbrush about 8 feet high. This strata was thinned 16-19 years ago. It will be regeneration harvested in 2014 and planted back in Loblolly pine.

#### Strata Recommendations

This strata wil be allowed to mature and harvested in 2014, then artificially regenerated into loblolly pine and will be managed for a 35 year rotation.

#### **Activity Recommendations**

#### Harvest

A regeneration harvest will be performed in the year 2014 on this strata.

#### Site Preparation

This strata will be site prepared by chemical application and site prep burned, if needed, in 2015.

#### Regeneration

This strata will be regenerated in 2015 with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 6 - Stands 4,5,15,22,24

#### Strata Description

Stands 4 (80.39 Ac.), 5 (0.93 Ac.), 15 (19.31 Ac.), 22 (2.06 Ac.), 24 (82.86 Ac.)

185.55 Acres

Stands 4,5,22, and 24 were mature stands that were harvested in the winter 2009 and 2010, and regenerated back into genetically improved containerized Loblolly pine in January 2011 with 624 trees per acre. They were chemically site prepped by helicopter in late summer of 2010.

Stand 15 is a 19 acre pasture that was reclassified into forestland in 2010. The stand was machine planted in February 2011 with 690 trees per acre. It was also band sprayed by four wheeler in April of 2011.

There are no planned management activities within this strata during the duration of this management plan. A first thin will be planned for 2025.

#### Strata Recommendations

This strata will be allowed to mature, then artificially regenerated into loblolly pine and will be managed for a 35 year rotation. There will be a planned first thin in 2025, with a second thin following in 2032. There are no planned activities during the duration of this management plan.

Strata 99 - Stands 25, 27 Stand Description Stands 25 (9.3 ac), 27 (10.31 ac)

19.61 Acres

This strata is in a Streamside Management Zone. These stands have some scattered pines throughout.

#### Stand Recommendations

There are no planned activities during the period of this management plan. This strata will remain in hardwood and follow Best Management Practices. Some thinning out of pine trees could take place during harvest activities of adjacent stands.

#### OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The boundary lines are being established and maintained to protect school board property from tresspass.

#### Line Recommendations

Once established, the boundary lines will need to be maintained on a 5 to 6 year rotation. The north line will be repainted in 2014, and the west line will be repainted in 2017. Some boundary lines need to be resurveyed when an active timber sale is planned on that property line.

#### **Activity Recommendations**

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

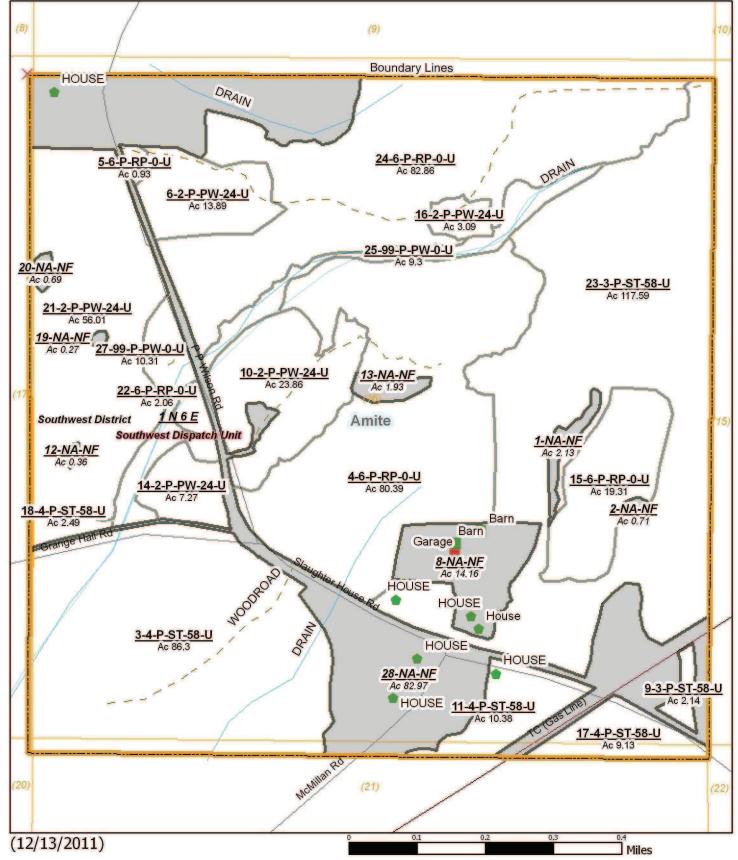
Boundary lines will be repainted in 2016.



## **Amite County Schools**

S16, 1N-6E 2011 to 2021 640.49 Acres +/-



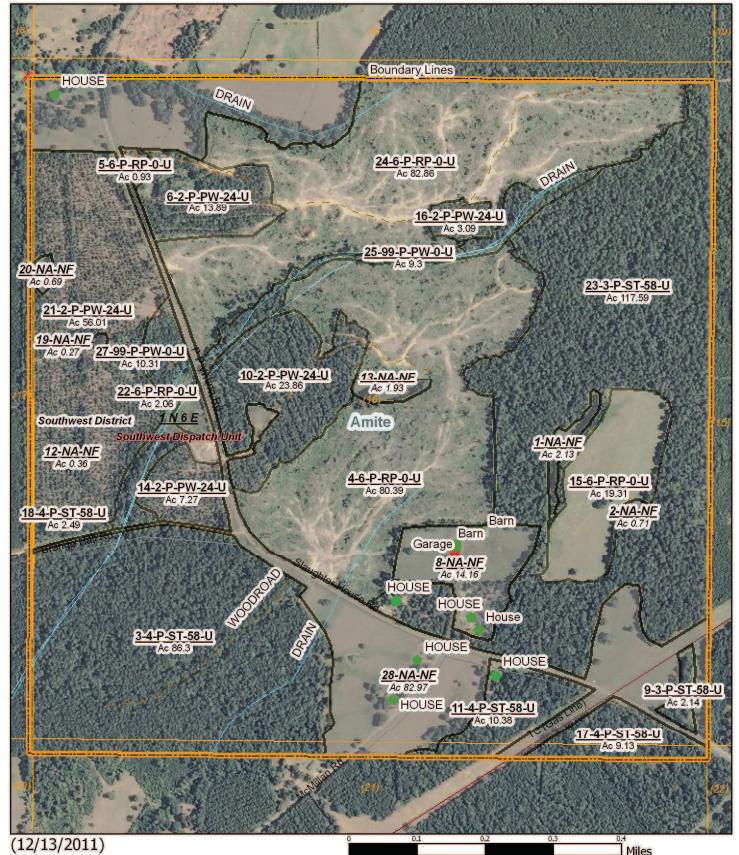




## **Amite County Schools**

S16, 1N-6E 2011 to 2021 640.49 Acres +/-





## AMITE COUNTY SCHOOLS S16 1N-6E



#### Property

Property

#### Category 1: Stands

Clear Cut

Non-Stocked

Reproduction

Sub-Merchantable

Pulpwood

Chip-n-Saw

Sawtimber

Poles

#### Category 3: Non-Forest Stands

Non-Forest

#### Structures

Barn

Tractor Shed

**Out Building** 

Single-Family

Multi-Family

Camp House

Club House Office Building

Manufacturing

Warehouse

Chicken House

Horse Stall

Milking Parlor

-Hog Pen

Blind

Stand

H Hospital

**Nursing Home** 

Dr. Clinic H State Facility

#### Structures (cont)

Office

Work Center

Materials Depot

Prison

School

☆ Church Mosque

Synagogue

Other

#### Property Roads/Trails

**Drive Ways** 

X Access Road

Logging Road

Skid Trail

Farm Road

Hiking Trail

Horseback Riding Trail

#### **Boundary Lines**

Archeology

Cemetery

**Drilling Sites** 

Education

Forest Health

**Invasive Species** 

Management Compartment

Military Area

Natural Area

Property

Recreation Rights of Way

SMZ

Special Use

Stand

Surface Mining

#### Boundary Lines (cont)

Threatened/Endangered Species

Visual Buffer

#### Transportation (Lines)

City Streets

County Roads

3 Digit Highway

Interstate Highway

**US Highway** 

State Highway

Natchez Trace Parkway

Runways/Airports

Active RR

Abandoned RR

#### Hydrology (Lines)

Mississippi River

Major River

**Primary Stream** 

**Intermittent Stream** 

Canal

Ditch

Earthen Dam

Concrete Dam

#### Utilities (Lines)

Large Electrical

Local Utility

Large Pipeline

Small Pipeline

Gas Line

Utility Line

Water Line

### Stand Activity Schedule for Amite County Schools 16 1N 6E

		10 IN OL						
Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue			
2014								
4	3	Harvest, Mechanical, Regeneration, Machine, Loblolly	86	\$3,010.00	\$238,517.56			
4	11	Harvest, Mechanical, Regeneration, Machine, Loblolly	10	\$350.00	\$27,734.60			
4	17	Harvest, Mechanical, Regeneration, Machine, Loblolly	9	\$319.55	\$25,321.69			
4	18	Harvest, Mechanical, Regeneration, Machine, Loblolly	2	\$87.15	\$6,905.92			
		Yearly Totals	108	\$3.766.70	\$298,479.77			
2015	2015							
4	3	Regeneration, Artificial, Plant, Hand, Loblolly	86	\$8,630.00	\$0.00			
4	3	Site Preparation, Chemical, Broadcast, Aerial, Combination	86	\$8,600.00	\$0.00			
4	11	Regeneration, Artificial, Plant, Hand, Loblolly	10	\$1,000.00	\$0.00			
4	11	Site Preparation, Chemical, Broadcast, Aerial, Combination	10	\$1,038.00	\$0.00			
4	17	Regeneration, Artificial, Plant, Hand, Loblolly	9	\$913.00	\$0.00			
4	17	Site Preparation, Chemical, Broadcast, Aerial, Combination	9	\$913.00	\$0.00			
4	18	Regeneration, Artificial, Plant, Hand, Loblolly	2	\$249.00	\$0.00			
4	18	Site Preparation, Chemical, Broadcast, Aerial, Combination	2	\$249.00	\$0.00			
		Yearly Totals	216	\$21,592.00	\$0.00			
2016								
3	9	Harvest, Mechanical, Regeneration, Machine, Loblolly	2	\$70.00	\$3,344.46			
3	23	Harvest, Mechanical, Regeneration, Machine, Loblolly	118	\$4,115.65	\$196,637.53			
		Yearly Totals	120	\$4,185.65	\$199.981.99			
2017	2017							

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2	6	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	14	\$490.00	\$2,450.00
2	10	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	24	\$835.10	\$6,919.40
2	14	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	7	\$254.45	\$2,108.30
2	16	Harvest, Mechanical, Thin, Machine, Loblolly	3	\$105.00	\$870.00
2	21	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	56	\$1,960.00	\$16,240.00
3	9	Site Preparation, Chemical, Broadcast, Aerial, Combination	2	\$200.00	\$0.00
3	9	Regeneration, Artificial, Plant, Hand, Loblolly	2	\$200.00	\$0.00
3	23	Regeneration, Artificial, Plant, Hand, Loblolly	118	\$11,759.00	\$0.00
3	23	Site Preparation, Chemical, Broadcast, Aerial, Combination	118	\$11,759.00	\$0.00
	·	Yearly Totals	343	\$27,562.55	\$28,587.70
		Grand Totals	786	\$57,106.90	\$527.049.45